#### REMARKS

# Summary of the Amendment

Upon entry of the above amendment, claims 19, 29, and 36 will have been amended. Accordingly, claims 19-25 and 28-38 remain pending.

## Summary of the Official Action

In the instant Office Action, the Examiner has rejected claims 19-25 and 28-38 over the art of record. By the present amendment and remarks, Applicants submit that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

# Amendment is Proper for Entry

While the instant application is under a final rejection, Applicants note that the pending amendments to independent claims 19 and 36, which merely cancel subject matter from the claims, returns the claims to subject matter previously considered by the Examiner following entry of Applicants' October 30, 2008 amendment. As the Examiner has already considered this subject matter and has performed a complete search for the subject matter recited in the currently amended independent claims, Applicants submit that no new issues requiring further search nor any question of new matter is raised in the pending amendment. Further, Applicants submit that the amendment to claim 29 to more clearly recite structure instead of means does not raise any new issues nor any question of new matter that would preclude entry and consideration of the pending amendments to the claims.

Therefore, Applicants request entry and consideration of this amendment and the preparation and mailing of a Notice of Allowability confirming that all pending claims are allowed.

### Traversal of Rejection Under 35 U.S.C. § 103(a)

# 1. Over Fujiwara in view of Berson

Applicants traverse the rejection of claims 19 – 22, 25, and 28 – 37 under 35 U.S.C. § 103(a) as being unpatentable over FUJIWARA (Japanese Patent document JP 040780551A) in view of BERSON (U.S. Patent No. 5,861,618). While acknowledging FUJIWARA's failure to disclose a first marking using an ink comprising a material based security element, the Examiner alleges it would have been obvious to modify FUJIWARA to include such a first marking in view of BERSON's disclosure of printing bar codes with invisible inks. Moreover, the Examiner alleges that the material of the invisible inks of BERSON can be "interpreted as a material based security element because it is invisible" and that material of the fluorescent inks can be considered a security element because it is luminescent with proper illumination. Applicants traverse the Examiner's assertions.

With regard to the pending rejection of the claims under 35 U.S.C. § 103(a), Applicants note the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, Applicants are under no obligation to submit evidence of non-obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met:

- (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- (2) there must be a reasonable expectation of success; and
- the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). *See* MPEP §2142.

Further, while rejecting a *rigid* application of the teaching, suggestion, or motivation ("TSM") test in an obviousness inquiry, the U.S. Supreme Court acknowledged the importance of identifying "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obviousness determination. *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1356-1357 (Fed. Cir. 2007) (quoting *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1731 (2007)).

Applicants' independent claim 19 recites a method that includes, *inter alia*, a) providing *information to be applied* to the item; b) applying a *first marking to the item corresponding to the information* provided in step a); c) reading said first marking applied in step b) and *comparing it with the information* provided in step a); and d) applying a second marking to the item if the first marking read in step c) does not correspond to the information provided in step a). Applicants' independent claim 36 recites a device that includes, *inter alia*, a) a first unit for *applying a first covert marking corresponding to information* to an item; b) a reading unit for *reading said first marking and the corresponding information* on said item; c) an electronic processor unit for *comparing said information read in step b*) with said information applied in step a); d) a second unit for applying a second marking to said item if said information read in step b) does not correspond to said information applied in step a), wherein said first unit, said reading unit, and said second unit are arranged in-line, and said first marking is printed in covert using an ink comprising a material-based security element selected from the group consisting of

luminescent materials, UV absorbers and IR absorbers. Applicants submit that no proper combination of FUJIWARA in view of BERSON under 35 U.S.C. § 103(a) can render obvious a method or device reciting at least the above-noted features.

Applicants note that FUJIWARA is directed to a system in which visible bar code marks are printed, read for authentication, and canceled/passed based on the reading. Moreover, Applicants agree with the Examiner's assessment that FUJIWARA does not disclose any manner for applying its markings, i.e., bar codes, with invisible or fluorescent inks or for reading information corresponding to any markings formed by invisible or fluorescent inks.

To address this acknowledged defect of FUJIWARA, the Examiner has cited BERSON as a document disclosing the reading of a marking that includes visible ink and invisible inks. In view of BERSON's disclosure of marks that include invisible inks, the Examiner alleges it would have been obvious to one ordinarily skilled in the art to modify FUJIWARA to apply markings with invisible or fluorescent inks. Applicants submit that the Examiner's allegations are not supportable under 35 U.S.C. § 103(a).

BERSON discloses a mark that includes a visible ink portion and a phosphorescent or fluorescent portion, invisible to the human eye. The phosphorescent or fluorescent portion is illuminated by a light source to cause the ink to emit or radiate light. BERSON generally describes that each ink is applied separately, but his invention is related to reading invisible marks already applied on a substrate, such as an envelope. However, because BERSON is not directed to the application of the marks onto the substrate, this document fails to provide any express or implied disclosure regarding curing times for the ink and/or how long after the mark application the individual inks forming the mark can be read.

With regard to the foregoing, it is noted that FUJIWARA expressly discloses that the marks printed on the labels are to be "read immediately after printing." (See English language Abstract of FUJIWARA). However, there is no discernable disclosure available to the ordinarily skilled artisan that suggests the inks applied to the substrate of BERSON can be immediately read in the manner intended by FUJIWARA. In fact, the only timing described by BERSON is how long after a fluorescent or phosphorescent ink has been illuminated it will provide an emitted or radiated light signal with sufficient amplitude for detecting.

Thus, Applicants submit that there is no reasonable disclosure in the applied art of record suggesting that the fluorescent or phosphorescent inks to be read by BERSON could be applied through the printing mechanism described by FUJIWARA, since BERSON implies the application of each ink is separately, see BERSON, col. 2, ll. 40 – 46. Moreover, the Examiner has not identified any disclosure in the applied art that even arguably suggests that the marking of BERSON on the substrate can be "read immediately after printing," as required by FUJIWARA. (*See* English language Abstract).

Further, as the Examiner has identified no express or implied suggestion in BERSON that the disclosed reader can read the mark immediately after printing in order to check the accuracy of mark applied to the substrate, Applicants submit that the Examiner has failed to identify any articulated reasoning in the applied art of record to suggest modifying FUJIWARA with the invisible ink reader of BERSON. Applicants submit that one ordinarily skilled in the art reviewing the applied art would have no reason to expect to the marking of BERSON can be read immediately after printing, as required by FUJIWARA. Thus, Applicants submit that, as the purported combination of FUJIWARA in view of BERSON would not allow FUJIWARA to operate in its intended manner, it would not have been obvious under 35 U.S.C. § 103(a) to

combine the applied art in the manner alleged by the Examiner. Therefore, Applicants submit that the asserted combination of FUJIWARA in view of BERSON under 35 U.S.C. § 103(a) is improper and should be withdrawn, and that, since the asserted combination of FUJIWARA in view of BERSON on which the pending rejection is based has been shown to be improper under 35 U.S.C. § 103(a), independent claims 19 and 36 should be indicated as allowable in the next official communication to the undersigned.

Further, Applicants submit that claims 20 - 22, 25, 28 - 35, and 37 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the embodiments of the invention. In particular, Applicants submits that no proper combination of FUJIWARA in view of BERSON under 35 U.S.C. § 103(a) can render obvious the embodiments recited in claims 19 - 22, 25, and 28 - 37.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 19-22, 25, and 28-37 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

#### 2. Over Fujiwara in view of Berson and further in view of Lubow

Applicants traverse the rejection of claims 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over FUJIWARA in view of BERSON and further in view of LUBOW (U.S. Patent Application Publication No. 2003/0080191).

Applicants note that LUBOW fails to expressly or impliedly disclose the subject matter noted above as being deficient in FUJIWARA and BERSON. In particular, Applicants note that LUBOW fails to disclose reading an invisible ink immediately after printing, such that LUBOW fails to provide any articulated reasoning that would render the combination of FUJIWARA in view of BERSON proper under 35 U.S.C. § 103(a). That is, as it has been shown above that the

Examiner's purported combination of FUJIWARA in view of BERSON under 35 U.S.C. § 103(a) is improper at least for the reason that the art of record fails to suggest immediately reading the invisible ink after printing, as required by FUJIWARA, Applicants submit that the Examiner has not identified any teaching of these deficient subject matter in LUBOW.

Accordingly, Applicants submit that, for the reasons set forth above, no proper combination of FUJIWARA in view of BERSON and further in view of LUBOW can render unpatentable the combination of features recited in at least Applicants' independent claim 19.

Further, Applicants submit that claims 23 and 24 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the embodiments of the invention. In particular, Applicants submits that no proper combination of FUJIWARA in view of BERSON and further in view of LUBOW under 35 U.S.C. § 103(a) can render obvious the embodiments recited in claims 23 and 24.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 23 and 24 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

## 3. Over Fujiwara in view of Berson and further in view of Genji

Applicants traverse the rejection of claim 38 under 35 U.S.C. § 103(a) as being unpatentable over FUJIWARA in view of BERSON and further in view of GENJI (Japanese Patent document No. JP 02202465).

Applicants note that GENJI fails to expressly or impliedly disclose the subject matter noted above as being deficient in FUJIWARA and BERSON. In particular, Applicants note that GENJI fails to disclose reading an invisible ink immediately after printing, such that GENJI fails to provide any articulated reasoning that would render the combination of FUJIWARA in view of BERSON proper under 35 U.S.C. § 103(a). That is, as it has been shown above that the

Examiner's purported combination of FUJIWARA in view of BERSON under 35 U.S.C. § 103(a) is improper at least for the reason that the art of record fails to suggest immediately reading the invisible ink after printing, as required by FUJIWARA, Applicants submit that the Examiner has not identified any teaching of these deficient subject matter in GENJI.

Accordingly, Applicants submit that, for the reasons set forth above, no proper combination of FUJIWARA in view of BERSON and further in view of GENJI can render unpatentable the combination of features recited in at least Applicants' independent claim 36.

Further, Applicants submit that claim 38 is allowable at least for the reason that it depends from an allowable base claim and because it recites additional features that further defines the embodiments of the invention. In particular, Applicants submits that no proper combination of FUJIWARA in view of BERSON and further in view of GENJI under 35 U.S.C. § 103(a) can render obvious the embodiments recited in claim 38.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 38 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

#### 4. Over Fujiwara in view of Auslander

Applicants traverse the rejection of claims 19 – 22, 25, and 28 – 37 under 35 U.S.C. § 103(a) as being unpatentable over FUJIWARA in view of AUSLANDER (U.S. Patent No. 6,905,538). While acknowledging FUJIWARA's failure to disclose a first marking using an ink comprising a material based security element, the Examiner alleges it would have been obvious to modify FUJIWARA to include such a first marking in view of AUSLANDER's disclosure of printing bar codes with invisible inks. Applicants traverse the Examiner's assertions.

As previously discussed above, Applicants' independent claim 19 recites a method that includes, *inter alia*, a) providing *information to be applied* to the item; b) applying a *first* 

marking to the item corresponding to the information provided in step a); c) reading said first marking applied in step b) and comparing it with the information provided in step a); and d) applying a second marking to the item if the first marking read in step c) does not correspond to the information provided in step a). Applicants' independent claim 36 recites a device that includes, inter alia, a) a first unit for applying a first covert marking corresponding to information to an item; b) a reading unit for reading said first marking and the corresponding information on said item; c) an electronic processor unit for comparing said information read in step b) with said information applied in step a); d) a second unit for applying a second marking to said item if said information read in step b) does not correspond to said information applied in step a), wherein said first unit, said reading unit, and said second unit are arranged in-line, and said first marking is printed in covert using an ink comprising a material-based security element selected from the group consisting of luminescent materials, UV absorbers and IR absorbers. Applicants submit that no proper combination of FUJIWARA in view of AUSLANDER under 35 U.S.C. § 103(a) can render obvious a method or device reciting at least the above-noted features.

Applicants note that FUJIWARA is directed to a system in which visible bar code marks are printed, read for authentication, and canceled/passed based on the reading. Moreover, Applicants agree with the Examiner's assessment that FUJIWARA does not disclose any manner for applying its markings, i.e., bar codes, with invisible or fluorescent inks or for reading information corresponding to any markings formed by invisible or fluorescent inks.

To address this acknowledged defect of FUJIWARA, the Examiner has cited AUSLANDER as a document disclosing the reading of a marking that includes visible ink and invisible inks. In view of AUSLANDER's disclosure of marks that include invisible inks, the

Examiner alleges it would have been obvious to one ordinarily skilled in the art to modify FUJIWARA to apply markings with invisible or fluorescent inks. Applicants submit that the Examiner's allegations are not supportable under 35 U.S.C. § 103(a).

AUSLANDER discloses an ink for applying a mark invisible to the human eye, but which fluoresces after being subjected to short wave ultraviolet radiation. As AUSLANDER discloses that the fluorescing ink is a spread image from the actual print boundaries, the machine reader of the fluorescing ink reads the characteristics of the fluorescing ink to verify application, not the information contained in the mark.

Thus, Applicants submit that neither applied document expressly or impliedly discloses any manner for reading the information contained in a marking printed using an ink comprising a material based security element, as recited in at least independent claims 19 and 36.

Because neither applied document discloses at least the above-noted features, Applicants submit that no proper combination of FUJIWARA in view of AUSLANDER can render obvious the embodiments of the invention recited in at least independent claims 19 and 36.

Further, as discussed above, FUJIWARA expressly discloses that the marks printed on the labels are to be "read immediately after printing." (See English language Abstract of FUJIWARA). While AUSLANDER discloses applying short wave ultraviolet radiation after the mark is printed, there is no discernable disclosure available to the ordinarily skilled artisan that suggests the time period between application of the mark and the irradiation of the mark. In fact, the only timing described by AUSLANDER is that the irradiation occurs after printing. Thus, Applicants submit that there is no reasonable disclosure in the applied art of record suggesting that the fluorescent inks applied by AUSLANDER can be "read immediately after printing," as required by FUJIWARA. (See English language Abstract).

Further, as the Examiner has identified no express or implied suggestion in AUSLANDER that the disclosed reader can read the mark immediately after printing in order to check the accuracy of mark applied to the substrate, Applicants submit that the Examiner has failed to identify any articulated reasoning in the applied art of record to suggest modifying FUJIWARA with the invisible ink reader of AUSLANDER. Applicants submit that one ordinarily skilled in the art reviewing the applied art would have no reason to expect to the marking of AUSLANDER can be read immediately after printing, as required by FUJIWARA. Thus, Applicants submit that, as the purported combination of FUJIWARA in view of AUSLANDER would not allow FUJIWARA to operate in its intended manner, it would not have been obvious under 35 U.S.C. § 103(a) to combine the applied art in the manner alleged by the Examiner.

Therefore, Applicants submit that the asserted combination of FUJIWARA in view of AUSLANDER under 35 U.S.C. § 103(a) is improper and should be withdrawn, and that, since the asserted combination of FUJIWARA in view of AUSLANDER on which the pending rejection is based has been shown to be improper under 35 U.S.C. § 103(a), independent claims 19 and 36 should be indicated as allowable in the next official communication to the undersigned.

Further, Applicants submit that claims 20 – 22, 25, 28 – 35, and 37 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the embodiments of the invention. In particular, Applicants submits that no proper combination of FUJIWARA in view of AUSLANDER under 35 U.S.C. § 103(a) can render obvious the embodiments recited in claims 19 – 22, 25, and 28 – 37.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 19-22, 25, and 28-37 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

# 5. Over Fujiwara in view of Auslander and further in view of Genji

Applicants traverse the rejection of claim 38 under 35 U.S.C. § 103(a) as being unpatentable over FUJIWARA in view of AUSLANDER and further in view of GENJI.

Applicants note that GENJI fails to expressly or impliedly disclose the subject matter noted above as being deficient in FUJIWARA and AUSLANDER. In particular, Applicants note that GENJI fails to disclose reading an invisible ink immediately after printing, such that GENJI fails to provide any articulated reasoning that would render the combination of FUJIWARA in view of AUSLANDER proper under 35 U.S.C. § 103(a). That is, as it has been shown above that the Examiner's purported combination of FUJIWARA in view of AUSLANDER under 35 U.S.C. § 103(a) is improper at least for the reason that the art of record fails to suggest immediately reading the invisible ink after printing, as required by FUJIWARA, Applicants submit that the Examiner has not identified any teaching of these deficient subject matter in GENJI.

Accordingly, Applicants submit that, for the reasons set forth above, no proper combination of FUJIWARA in view of AUSLANDER and further in view of GENJI can render unpatentable the combination of features recited in at least Applicants' independent claim 36.

Further, Applicants submit that claim 38 is allowable at least for the reason that it depends from an allowable base claim and because it recites additional features that further defines the embodiments of the invention. In particular, Applicants submits that no proper

combination of FUJIWARA in view of AUSLANDER and further in view of GENJI under 35 U.S.C. § 103(a) can render obvious the embodiments recited in claim 38.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 38 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

#### Application is Allowable

Thus, Applicants respectfully submit that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. §§ 102 and 103, and respectfully request the Examiner to indicate allowance of each and every pending claim of the present invention.

# Authorization to Charge Deposit Account

The undersigned authorizes the charging of any necessary fees, including any extensions of time fees required to place the application in condition for allowance by Examiner's Amendment, to Deposit Account No. 19 - 0089 in order to maintain pendency of this application.

#### **CONCLUSION**

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicants' invention, as recited in each of claims 19-25 and 28-38. The claims applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

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Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,

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